TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104 Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION

WIN-1477

Effective December 1, 2011

The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code** (IRC) and the **International Building Code** (IBC). This product shall be subject to reevaluation **June 2015**.

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code and the Texas Engineering Practice Act.

Series 165TX Aluminum Single Hung Tilt Windows, Individual, Non-impact Resistant manufactured by

General Aluminum Company of Texas, LP 1001 W. Crosby Road Carrollton, Texas 75006 Telephone: (972) 242-5271

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The Series 165TX windows are aluminum single hung windows. The aluminum single hung windows evaluated in this report are individual, non-impact resistant windows. The aluminum single hung windows evaluated in this report are based on the following tested constructions:

General Description:

System	Description	Label Rating
1	Series 165TX Aluminum Single Hung Tilt Windows; O/X	H-R35 48x72

Product Dimensions:

System	Overall Size	Sash Size	Fixed Daylight Opening Size
1	48" x 72"	46 ½ " x 36 ½ "	44 ½ " x 33 ½ "

Glazing Description:

System	Glass Construction 1	Glazing Method ²		
1	IG-1	GM-1		

Note: ¹ See the "Glass Construction Key" for the glazing construction.

² See the "Glazing Method Key" for the glazing method description.

Glass Construction Key:

IG-1: The sealed insulating glass units are comprised of minimum two double strength (½ ") annealed glass lites separated by an aluminum desiccant-filled spacer system sealed with a polysulfide glass sealant. The glass thickness and type used in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:

GM-1: The insulating glass units are interior glazed using adhesive foam tape. The insulating glass units are held in place with vinyl snap-in glazing beads.

Frame Construction: The frame is manufactured of extruded aluminum. The frame corners are coped, butted, and fastened with two (2) screws at each corner.

Sash Construction: The operable and the fixed sash are manufactured of extruded aluminum. The sash corners are coped, butted and fastened with two (2) screws per corner.

Reinforcement: None.

Product Identification: A certification program label (AAMA) will be affixed to the window. The certification program label shall include the manufacturer's code name (GA-1); product name **Series 165TX Single Hung**; performance characteristics; the approved inspection agency (AAMA); and the applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05.

LIMITATIONS

Design pressures:

- 7				
	System	Maximum Width (in.)	Maximum Height (in.)	Design Pressure (psf)
	1	48	72	±35

Impact Resistance: These window assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These window assemblies will need to be protected with an impact protective system if installed in areas where windborne debris protection is required.

Acceptance of Smaller Assemblies: Windows assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The window assembly shall be installed in accordance with the manufacturer's installation instructions. Detailed drawings and installation instructions are available from the manufacturer.

Installation:

(Nailing Fin Installation): The wood framing members shall be minimum Spruce-Pine-Fir lumber. The windows shall be secured to the wall framing utilizing the nailing fin of the window with minimum 6D (0.113" x 2" long) smooth shank) nails. The fasteners shall be located approximately 6 inches from each end corner and approximately 18 inches on center along the perimeter of the window. The fasteners shall be long enough to penetrate a minimum of $1\frac{1}{2}$ inches into the wall framing.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.